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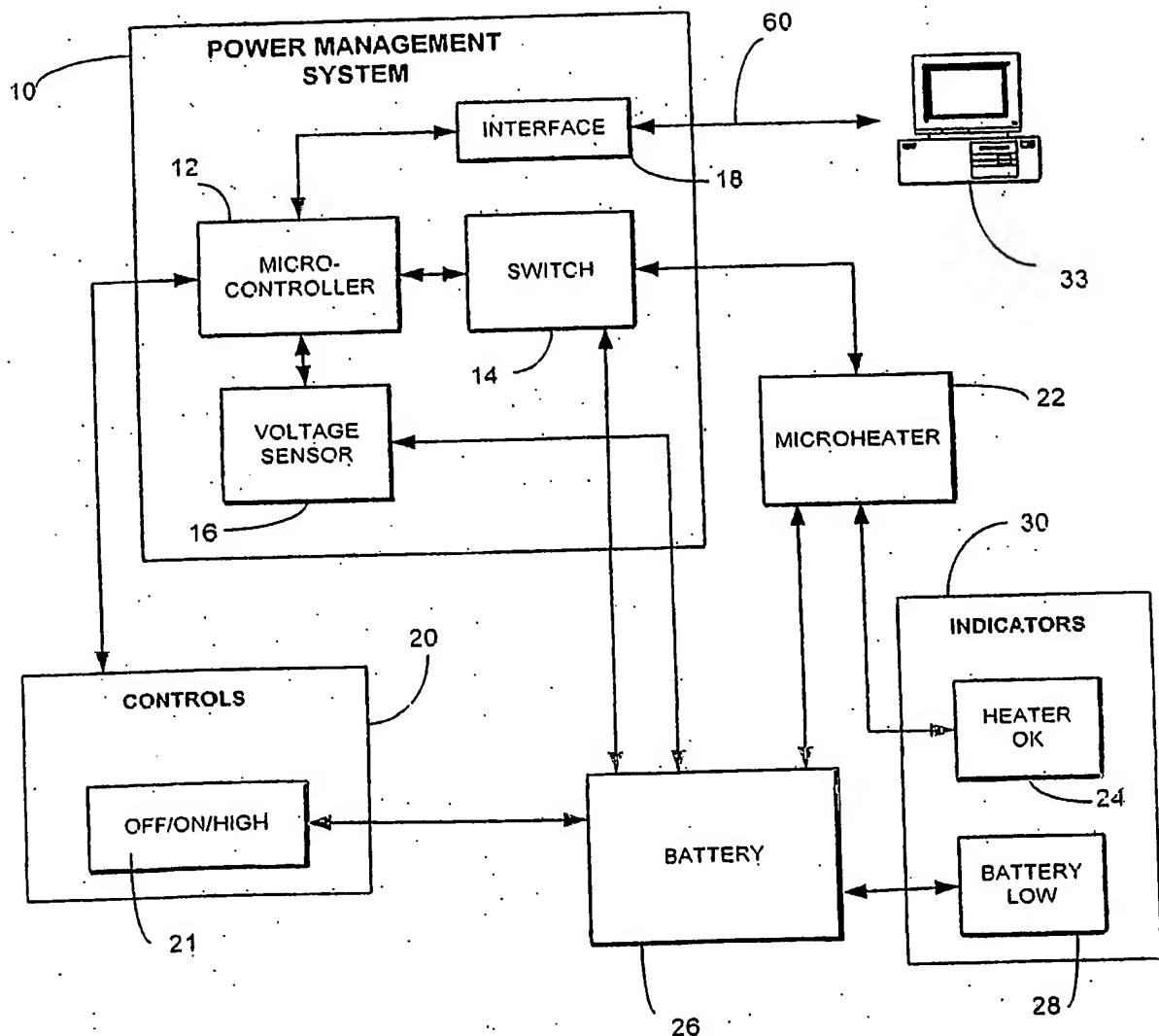
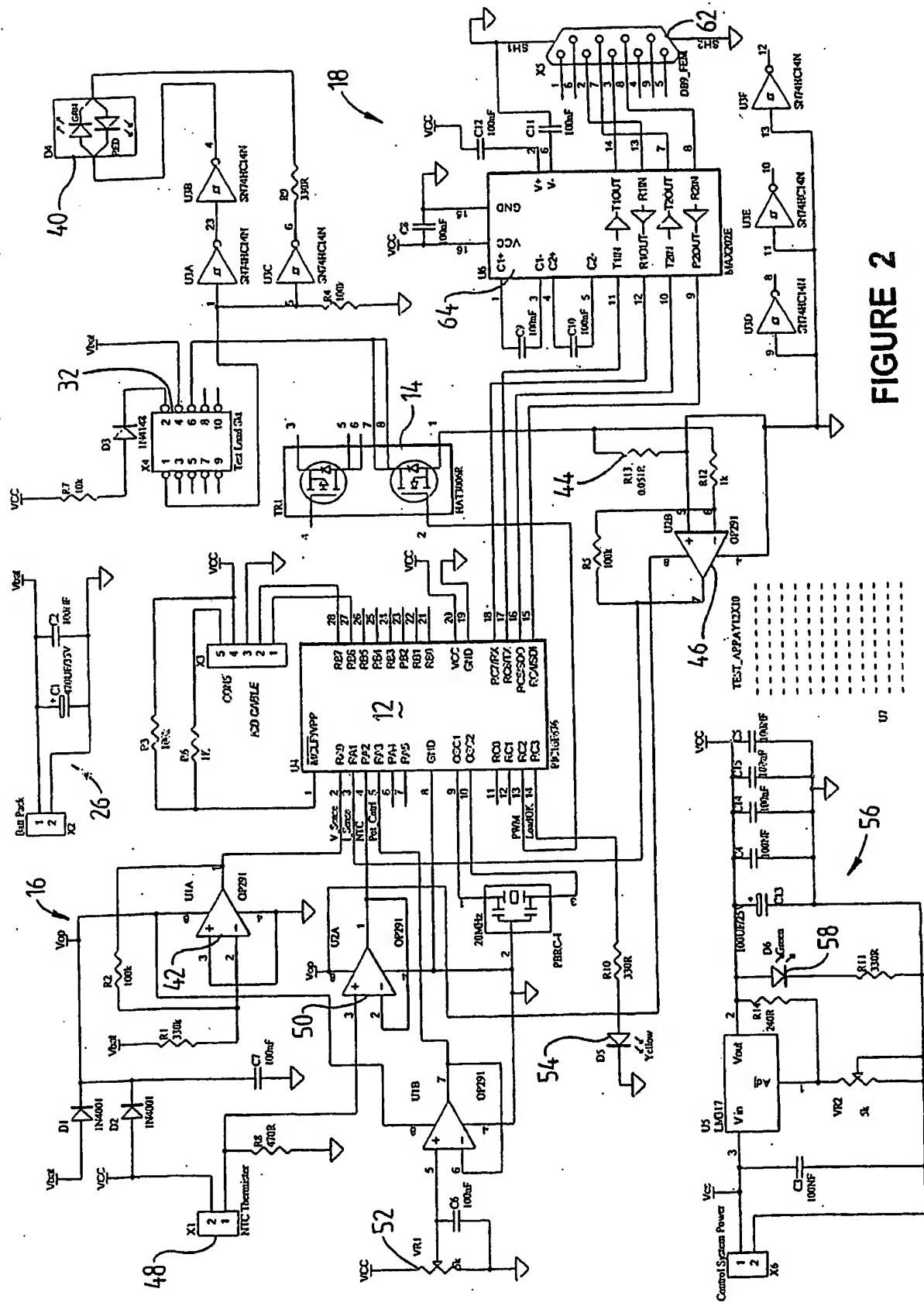


FIGURE 1

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## FIGURE 2

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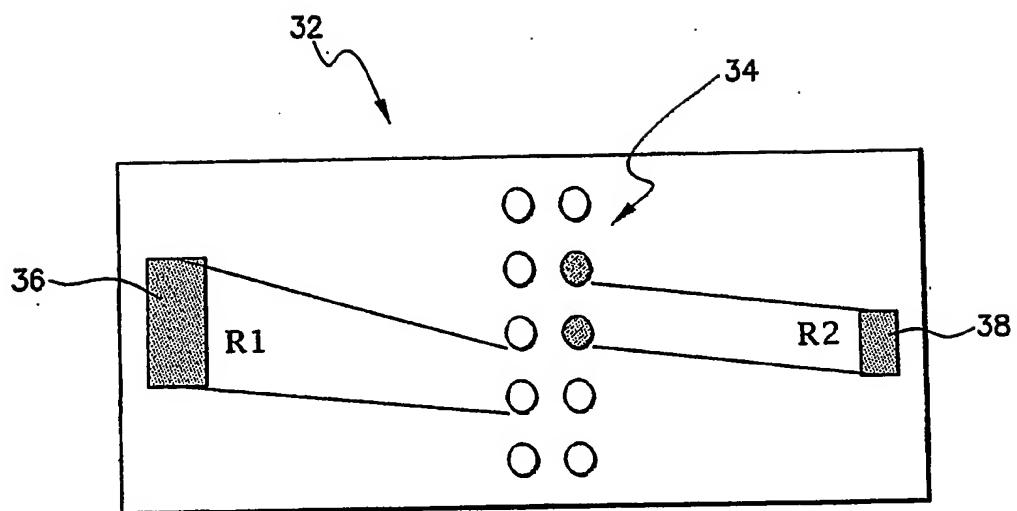
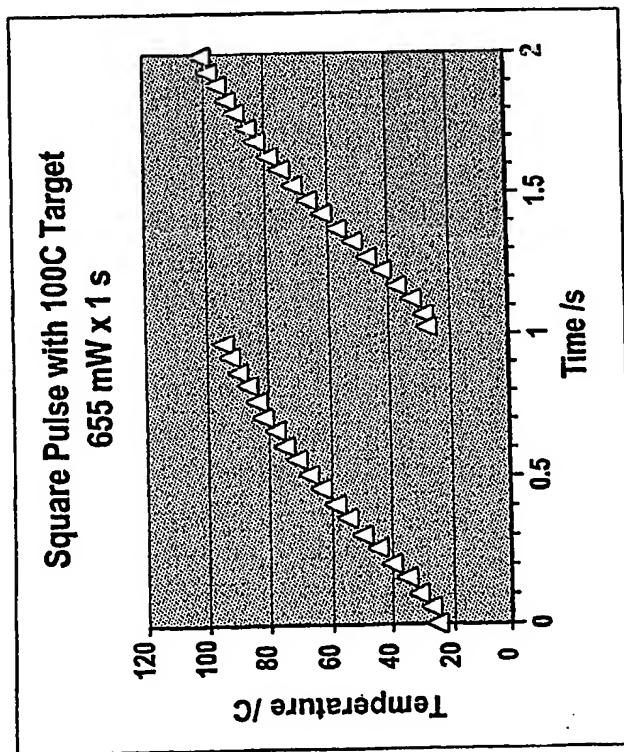


FIGURE 3

## Temperature Measurements

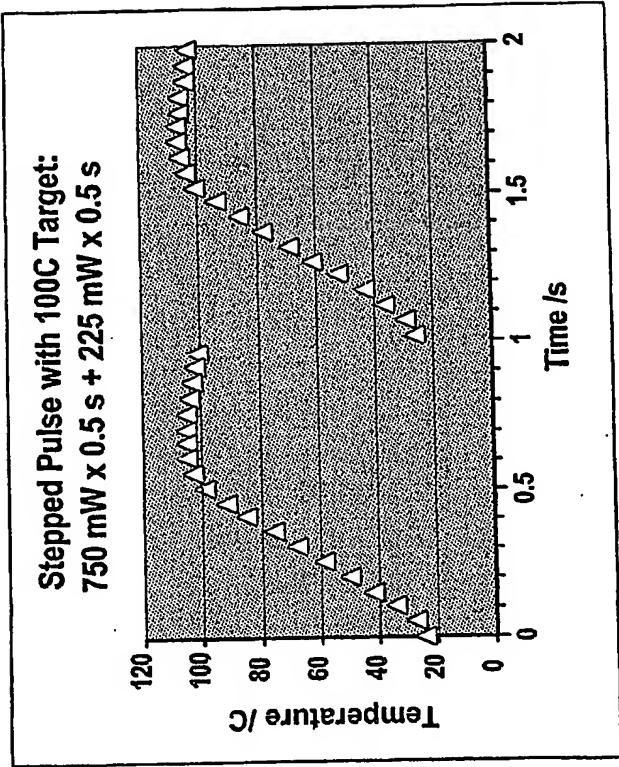
Energy efficiency of simple and compound pulses

Target temperature 100C, duration 1 s



Energy Cost: 655 mJ/pulse

25% energy saving, temperature maintained longer

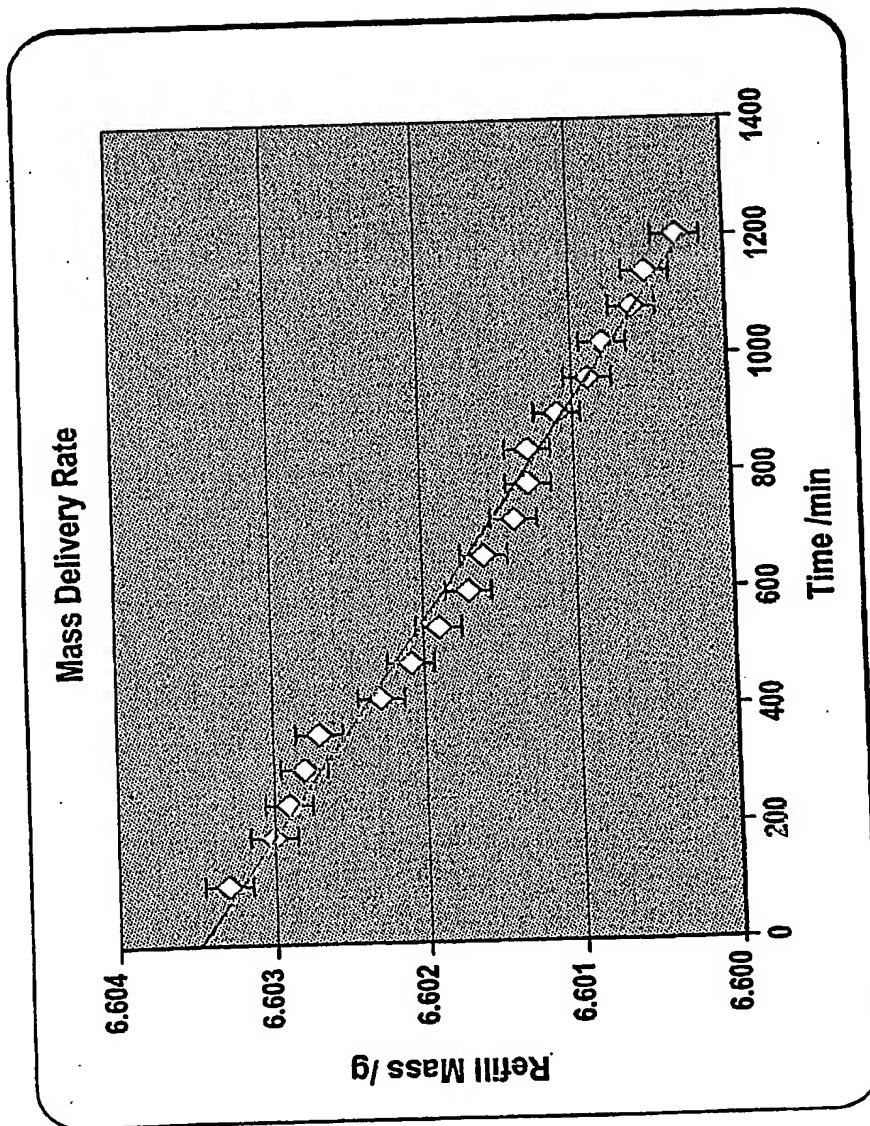


Energy Cost: 485 mJ/pulse

**FIGURE 4**

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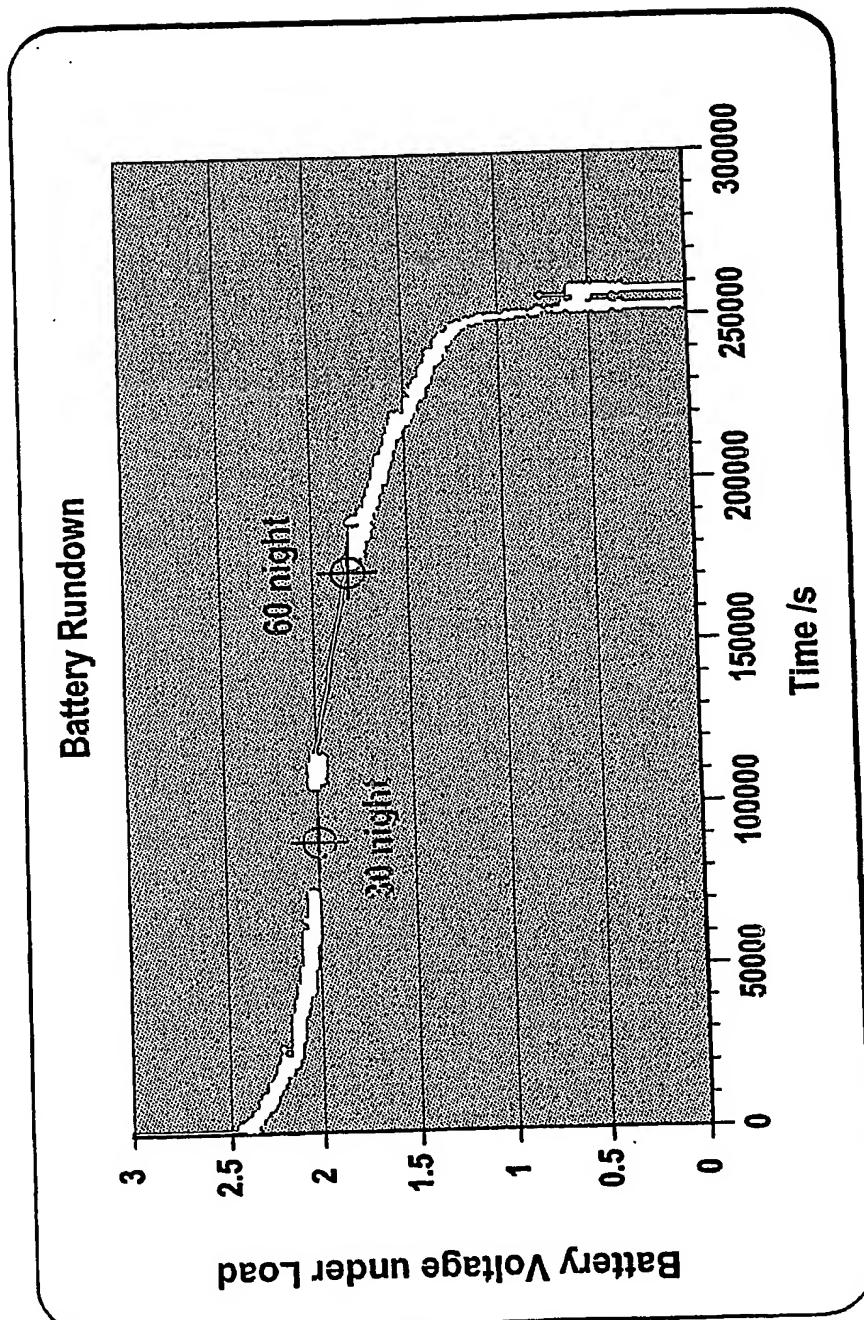
## Performance: Delivery Rates



0603  
4R7  
2 x AA  
3V  
 $T_{on} = 0.3 \text{ s}$   
 $T_{pulse} = 1.7 \text{ s}$   
 $T_{cycle} = 60 \text{ s}$   
% Pulse = 50%  
Adaptive Mode  
80  $\mu\text{m}$  wick  
100% 51264

FIGURE 5

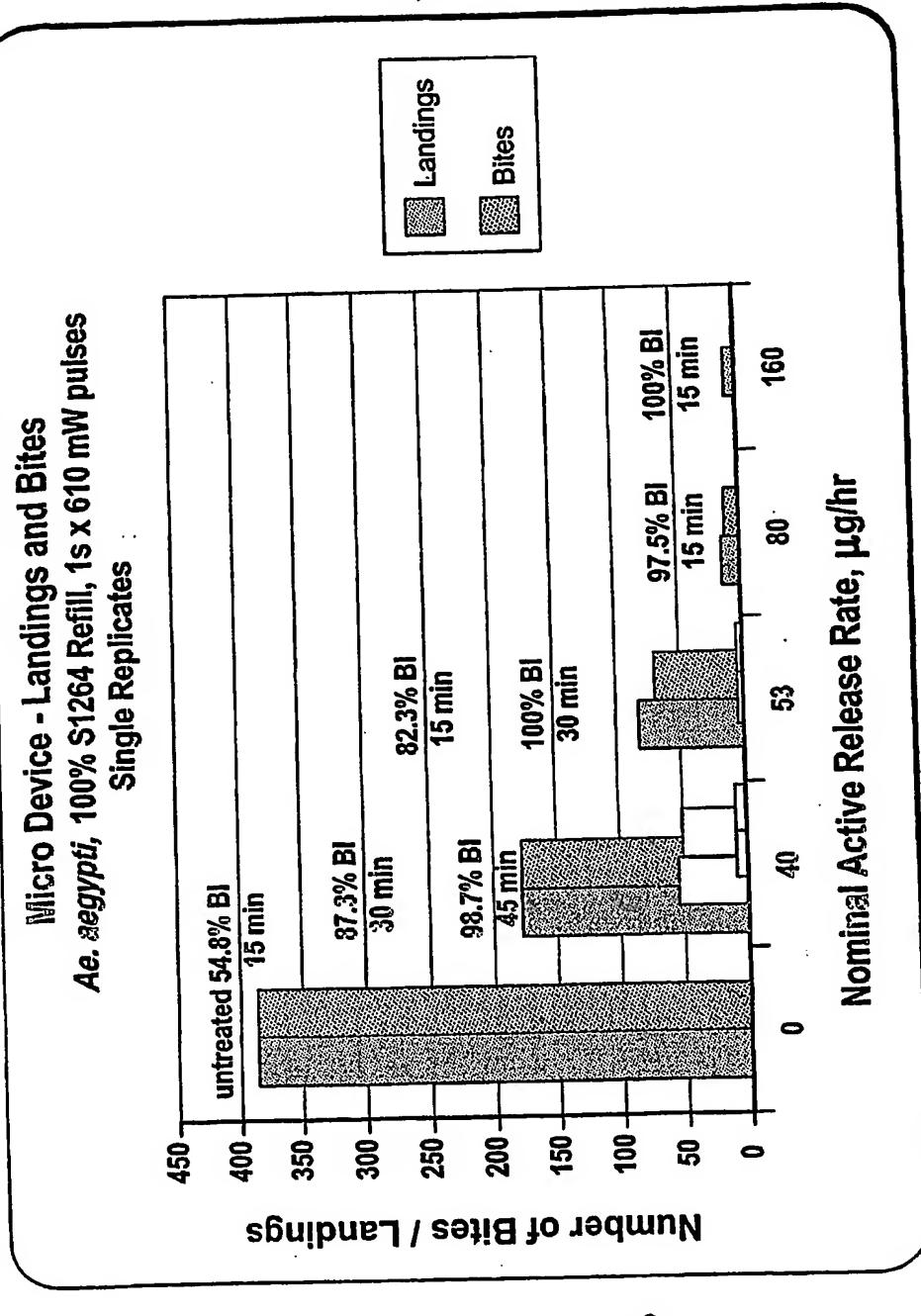
## Performance: Battery Lifetime



2 x AA quality alkaline batteries give  
1 - 2 months performance at 50  $\mu\text{A}/\text{hr}$

**FIGURE 6**

## Performance: Bioefficacy



50  $\mu\text{g}/\text{hr}$  = 1 x 2s pulse per 3 min 125  
 90% bite inhibition in 15 min (5 replicates)

FIGURE 7